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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/630,981 | 07/31/2003 | Yoshihisa Miura | K06-159678M/AT | 1859 |
| 21254 | 7590 | 09/27/2004 | EXAMINER | |
| MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817 | | | BONCK, RODNEY H | |
| | | ART UNIT | PAPER NUMBER | |
| | | 3681 | | |

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/630,981 | MIURA, YOSHIHISA |
| | Examiner | Art Unit |
| | Rodney H. Bonck | 3681 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 08 December 2003.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-4 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 08 December 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 12/8/03.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

The following is a first action on the merits of application Serial No.10/630,981, filed July 31, 2003.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

Receipt is acknowledged of the Information Disclosure Statement filed December 8, 2003. The cited documents have been considered.

Drawings

The substitute sheets of drawing were received on December 8, 2003. These drawings are objected to because Figs. 6-10 appear to show prior art, but have not been labeled "PRIOR ART".

Specification

The disclosure is objected to because of the following informalities:

In line 16 of page 3, "revers" apparently should be – reverse --.

In line 7 of page 9, "an" should be – a --.

Appropriate correction is required.

Claim Objections

Claim 1 is objected to because of the following informalities:

In line 11 of claim 1, "a" should be – an --.

The language in lines 12-13, "formed by one end portion of said spring overlaps with the other end portion", is awkward and should be reworded. It is suggested that this language be changed to -- formed by one end portion of said spring overlapping the other end portion --, or -- formed by one end portion of said spring that overlaps with the other end portion --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no proper antecedent basis for "the largest repulsive force", recited in lines 10-11 of claim 1, and it is unclear to what force this refers. Claim 1 defines the spring as having "annular portions having corrugated parts". Thus there is no proper antecedent of "said corrugated parts of the one end portion". In addition, it is unclear what is referred to by "the other end portion of said spring define."

In claim 3, there is no proper antecedent basis for “the largest repulsive force”, line 11, and it is unclear to what force this refers. In lines 16-17 of claim 3, it is unclear what is meant by “along with said smooth part of said first end.” Claim 4 is further indefinite because it is unclear what is meant by the expression “formed so bent as to fit into a curve from said smooth part through to said corrugated part.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, insofar as definite, are rejected under 35 U.S.C. 103(a) as being unpatentable over Message('987) in view of the admitted prior art (line 11 of page 1 to line 3 of page 5 of applicant's specification). Message discloses a one-way clutch comprising a cage 3, a spring 1 arranged along an inner diameter side of the cage, and a sprag 2. As seen in fig. 7, the ends of the spring are overlapped, and the corrugated part 14 serves to position the overlapped parts. The cage would appear to exert a uniform repulsive force. Thus the overlapped ends are positioned at a position where the largest repulsive force is exerted as claimed. Message does not specify whether the cage is press fitted to the inner race 5. Applicant acknowledges in the specification, however, that press fitting the cage in the outer ace is conventional, and it would have

been obvious to use this conventional technique in Message, the motivation being to secure the cage in the outer race.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ferris('019), Kinoshita et al.('167), Troendly et al.('027), Lanzerath et al.('221), Miura et al.(US 2003/0006114 A1), and Leitz('949) show other one-way clutches with springs that have overlapped ends.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (703)-308-2904. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (703)-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3681

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb

September 20, 2004